

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An isolated polypeptide having a thermostable ribonuclease H activity, selected from the group consisting of:

(a) a polypeptide having the amino acid sequence of SEQ ID NO:1; and

(b) a polypeptide encoded by a nucleic acid hybridizing to the nucleotide sequence of SEQ ID NO:2 or a complementary strand thereof under conditions of incubation with a probe in 6 X SSC (1 X SSC: 0.15 M NaCl, 0.015 M sodium citrate, pH 7.0) containing 0.5% SDS, 0.1% bovine serum albumin (BSA), 0.1% polyvinylpyrrolidone, 0.1% Ficoll 400 and 0.01% denatured salmon sperm nucleic acid at ~~50~~68°C for 12 to 20 hours followed by washing in ~~2-0.1~~ X SSC containing 0.5% SDS at ~~37~~68°C while changing the SSC concentration down to 0.1 X and the temperature up to 50°C until a signal from an immobilized nucleic acid can be distinguished from background.

Claims 2-5. (Cancelled)

6. (Previously Presented) An isolated polypeptide having a thermostable ribonuclease H activity, obtained by

culturing a transformant into which a plasmid pApr108 harbored by *Escherichia coli* HMS174/pApr108 (deposited under accession no. FERM BP-8433) is transferred.